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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/521,128

01/12/2005

Arnaud Bourge

FR 020073

6815

24737

7590

10/20/2008

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

PE, GEEPY

ART UNIT

PAPER NUMBER

2621

MAIL DATE

DELIVERY MODE

10/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/521,128	Applicant(s) BOURGE ET AL.	
	Examiner Geepy Pe	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/12/2005, 2/23/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The disclosure is objected to because of the following informalities:

Page 2, line 27, applicant should amend "an" to -- a --.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 4 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

A) Claims that recite nothing but the physical characteristics of a form of energy, such as frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena, *O'Reilly*, 56 U.S. (15 How.) at 112-14. Moreover, it

Art Unit: 2621

does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set for in § 101.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims **1-6** are rejected under 35 U.S.C. 102(e) as being anticipated by Bourge et al.

(U.S. Pat. App. Pub. US 2005/0232353, hereinafter “Bourge”)

The applied reference has common inventors and assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Regarding **claim 1**, Bourge teaches a video coding method for the compression of a bitstream corresponding to an original video sequence that has been divided into successive groups of frames (GOFs) the size of which is $N = 2^n$ with $n = 1$, or 2, or 3,..., (Fig. 1; para. 0041, lines 6-7) said coding method comprising the following steps, applied to each successive GOF of the sequence: a) a spatio-temporal analysis step, leading to a spatio-temporal multiresolution

Art Unit: 2621

decomposition of the current GOF into 2^n low and high frequency temporal subbands (Fig. 1; para. 0007, lines 9-13 & 19-21), said step itself comprising the following sub-steps: a motion estimation sub-step (Fig. 1; para. 0007, line 17: i.e., the motion compensation step would perform a motion estimation); based on said motion estimation, a motion compensated temporal filtering sub-step, performed on each of the 2^{n-1} couples of frames of the current GOF (Fig. 1; para. 0002; para. 0007, line 16 – para. 0008, line 7); a spatial analysis sub-step, performed on the subbands resulting from said temporal filtering sub-step (para. 0003); b) an encoding step (para. 0008, lines 15-16; para. 0023, lines 16-20; Fig. 2, elements 21 & 22), said step itself comprising: an entropy coding sub-step, performed on said low and high frequency temporal subbands resulting from the spatio-temporal analysis step and on motion vectors obtained by means of said motion estimation step (para. 0008, lines 15-16; para. 0023, lines 16-20; Fig. 2, element 21); an arithmetic coding sub-step, applied to the coded sequence thus obtained and delivering an embedded coded bitstream (para. 0023, lines 16-20; Fig. 2, element 22); said coding method being further characterized in that, in the encoding step, the 2^n frequency subbands available at the end of the analysis step for each GOF are coded in an order that corresponds to a progressive reconstruction of the couples of frames of said GOF in their original order, the bits necessary to later decode the first couple of frames being at the beginning of the coded bitstream, followed by the extra bits necessary to decode the second couple of frames, and so on, up to the last couple of frames of the current GOF (Fig. 2; para. 0022, lines 1-5).

Regarding **claim 2**, Bourge teaches that, n being equal to 3, among the set of subbands available for the current GOF at the end of said analysis step and comprising the high frequency temporal subbands (H0, H1, H2, H3) of the first decomposition level, the high frequency

Art Unit: 2621

temporal subbands (LH0, LH1) of the second decomposition level and the low and high frequency temporal subbands (LLL0, LLH0) of the third decomposition level, the subbands (LLL0, LLH0, LH0, H0) are first coded, then the subband H1, then the subbands (LH1, H2), and then the subband H3 (Figs. 3-6).

Regarding **claims 3-6**, the claim(s) recites analogous limitations to claim(s) 1 above, and is/are therefore rejected on the same premise.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Pat. App. Pub. US 2002/0101929.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geepy Pe whose telephone number is (571)-270-3703. The examiner can normally be reached on Monday - Friday, 7:00AM - 3:30PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/G. P./

/Geepy Pe/

Examiner, Art Unit 2621

/Andy S. Rao/

Primary Examiner, Art Unit 2621

October 17, 2008